# SECTION – C
## (DESCRIPTIVE QUESTIONS)



Q-16: (a) Simplify $\frac{x+2y}{x^2 - xy} \div \frac{x^2+4xy+3y^2}{x(x^2-y^2)}$

(b) Solve the equation $5x^2 + 11x = 4(3x + 1)$ with the help of quadratic formula.

Q–17: (a) Prove that if a side of a triangle is extended, the exterior angle so formed is, in measure, greater than either of the two interior opposite angles.

(b) Find the factor of $x^3 - x^2 - 14x + 24$ with the help of remainder theorem

Q-18. (a) Find all the values of trigonometric ratio of 45°.

(b) Find the value of $\frac{\sqrt{431.5 \times (1.2)^2}}{\sqrt[3]{36.98}}$ with the help of logarithm.

Q : 19(a) On the bank of a sea, there is a light house, 100 m high. The angle of deressin of a ship from the top of the light house is of 45°. Find the distance between the foot of the light house and the ship.

(b) If $A = \begin{bmatrix} 3 & 2 \\ 5 & 4 \end{bmatrix}$, then find A-1

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(b) If $A = \begin{vmatrix} 1 & 3 \\ 2 & 4 \end{vmatrix}$ $B = \begin{vmatrix} 1 & 5 \\ 3 & 0 \end{vmatrix}$ $C = \begin{vmatrix} 3 & 1 \\ 2 & -1 \end{vmatrix}$

Then prove that A9B + C) = AB + AC

Q.(20) (a) If U = {1.2.3.....20} A, = {1,2,4,8,10,16,20) and B = {2.6.8.10.14.18} then verify De Morgan's Laws.